

REMARKS

Favorable reconsideration of the above-identified application is requested in view of the following comments. Claims 1, 3-7, 9-13, 15-20 and 22-28 are pending, with Claims 1, 7, 13, 20 and 26-28 being independent.

Claims 1, 3, 5 – 7, 9, 11 - 13, 15, 17 - 20, 22, and 24-28 are rejected under 35 U.S.C. §103(a) as being allegedly unpatentable over U.S. Patent No. 6,577,746, hereinafter *Evans*, in view of U.S. Patent No. 5,987,127, hereinafter *Ikenoue*. Claims 4, 10, 16 and 23 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Evans* in view of *Ikenoue* and U.S. Patent No. 3,760,159, hereinafter *Davis*.

Claim 1 defines an image processing apparatus. A detecting unit detects all pieces of additional information that are embedded in image data. A storage unit stores the detected pieces of additional information in association with location information thereof. An analyzing unit analyzes the detected pieces of additional information and judges whether any of the detected pieces of additional information includes predetermined information that is updateable. The apparatus further includes an embedding unit that:

- 1) updates, when a judgment result of the analyzing unit is affirmative, the predetermined information included in the piece of additional information, and embeds the piece of additional information including the updated predetermined information into the image data at a location where the piece of additional information is originally embedded, by referring to the stored location information, and

- 2) embeds, when the judgment result of the analyzing unit is negative, a new piece of additional information including updated information into the image data at a

location that does not overlap locations where the detected pieces of additional information are embedded, by referring to the stored location information, the updated information being equivalent to the predetermined information.

Neither *Evans* nor *Ikenoue* discloses that subject matter, either separately or in combination.

Evans discloses a watermark-based object linking and embedding system, wherein a watermark can be inserted into image data. The watermark causes the image processor to seek information or images identified by the watermark and insert the identified information or images into the image data to create a "composite image". The system has at least two embodiments. In one embodiment, the image to be imported that is identified by the watermark itself includes a watermark so that if the composite image is further copied, the watermark in the imported image/composite image will again seek the imported image enabling an updated version of the imported image to be inserted into the copy of the composite image. See column 3, lines 39 – 47. In the second embodiment, the imported image does not have a watermark so that future copies of the composite image will not seek the imported image and the copy of the composite image will be identical to the composite image. See column 3, lines 52 – 58.

In the rejection, the Examiner alleges that column 2, lines 25 – 30 and 61 – 65, of *Evans* corresponds to the storage unit in claim 1 that stores the detected pieces of additional information in association with location information *thereof*, i.e., the location of the watermark. However, that section of *Evans* does not indicate that the watermark includes storage information concerning the location of the watermark. The location information referred to in *Evans* concerns the location (size,

rotation, etc.) where the imported image is to be inserted into the original image. It does not concern the location of the watermark. Accordingly, *Evans* does not teach or suggest the claimed storage unit.

Claim 1 further recites an embedding unit, that updates, when a judgment result of the analyzing unit is affirmative, the predetermined information included in the piece of additional information, and embeds the piece of additional information including the updated predetermined information into the image data at a location where the piece of additional information is originally embedded, by referring to the stored location information. For that element, the Examiner refers to column 3, lines 29 – 33 and 47 – 52, of *Evans*.

However, *Evans* does not teach that the additional information (e.g., the watermark) is updated. *Evans* teaches that the image retrieved by the watermark may be incorporated into the composite image, thus "updating" the composite image with the latest version of the retrieved image. See column 3, lines 39 – 51, wherein *Evans* explains that the picture (i.e., the resulting composite image) is to be updated with the latest version of the image retrieved by the watermark. Thus, the watermark-based enhancement is to the composite image, not to the watermark itself. See also column 5, lines 8 – 12. Nowhere does *Evans* teach updating the watermark or anything that may be referred to as additional information that is embedded in image data.

As set forth above, *Evans* does not teach or suggest updating the watermark, it, at best, teaches updating the composite image with a new version of the image retrieved by the watermark. If the Examiner takes the position that the watermark in *Evans* is the additional information, Applicants submit that the *Evans* does not teach

updating the watermark. If the Examiner takes the position that the image retrieved by the watermark is the additional information, Applicants submit that the image retrieved by the watermark is not analyzed by an analyzing unit to determine if the additional information includes information that is updatable. In either event, *Evans* functions differently than the present invention.

The Examiner relies upon *Ikenoue* for an alleged teaching of embedding a new piece of additional information including updated information into first image data at a location that does not overlap locations where the detected pieces of information are embedded.

Ikenoue extracts additional information from inputted image data to separate the additional information from image data. In addition, newly generated additional information and additional information updated according to an analysis is then newly embedded in the pre-embedded image data. However, *Ikenoue* does not teach or suggest that when extracting additional information from the inputted image data, information concerning the location of the extracted information from the inputted image data is extracted and stored. Specifically, since *Ikenoue* does not extract and store location information concerning the additional information, when embedding additional information, *Ikenoue* teaches that a search is newly performed for a location having a density level that enables the additional data to be embedded, without considering the original location in which the extracted additional information was embedded. The location in which the additional information can be embedded is determined by searching either for a location in the image exhibiting no change in density or a location having a pre-determined density band in the case of half tones. See column 8, line 52 through column 9, line 3 of *Ikenoue*.

The Examiner states (in a prior Office Action) that: "Ikenoue does not disclose expressly a storage unit that stores the detected pieces of additional information in association with location information thereof; that said updated predetermined information is embedded by referring to the stored location information; and that said embedding unit embeds the information at a location where said predetermined information is originally embedded. "

Accordingly, *Ikenoue* does not overcome the deficiencies set forth above with respect to *Evans*.

For at least those reasons, the alleged combination of *Evans* and *Ikenoue*, as proposed by the Examiner, does not disclose the combination of features defined by Claim 1, and Claim 1 is allowable.

Claims 7, 13, 20 and 26-28 are allowable for similar reasons as Claim 1 with regard to similar claim language.

Claims 3, 5, 6, 9, 11, 12, 15, 17-19, 22, 24 and 25 are allowable at least by virtue of their dependence from allowable independent claims.

With regard to claims 4, 10, 16 and 23, *Davis* does not overcome the deficiencies of the rejections of the independent claims from which Claims 4, 10, 16 and 23 depend. For at least that reason, they are allowable too.

Based on the above-observations, it is respectfully requested that all the rejections set forth be reconsidered and withdrawn. Should any questions arise in connection with this application, or should the Examiner feel that a teleconference would be helpful in resolving any remaining issues pertaining to this application, the undersigned requests that he be contacted at the number indicated below.

Respectfully submitted,

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